Name of Work : Drilling of 7no's of Borewell & fixing of pump motor and necessary accessories at Abbigere, Shettyhalli, Medarahalli, in different Locations, ward no. 12, in Settyhalli Sub-Division

AEE/SSD/SGR 32/14-15/29.5.14

Original / Duplicate / Triplicate

CONTRACT CERTIFICATE

IST AND Final BILL (For Other Works)

No. EE/DD/WO./311/2013-14 **Date : 04-03-2014**

JOB NO : 012-14-000049 P Code No. 1802

Division : Dasarahalli Division Sub-Division :

Bill Received No 157/14-15 Dated 31.5.2014 Cash Book Voucher No. ..... Dated .....

Scheduled Docket No.

Name of Contractor and full Address

Technical manager (west) KRIDL, BBMP Project Implementation unit, Bangalore

Reference to Agreement No.

Certified that measurement were taken by me on ..29/5/14.. and recorded of pages 178907 to 178918 of measurement Book No. 1790/13-14 and that the work is satisfactorily executed.

Technical Manager (TM-2) KRIDL, Dasarahalli Zone, Bangalore

Contractor

29/5/14

Office-in-charge of work

Certified that the measurement were taken by me on 29/5/14 and found correct. The work is satisfactorily executed.

Certified that the quantities of materials shown in column 3 of Account II have been actually brought to site of the work and the contractor has not previously received any advance on this security. These materials are of an imperishable nature and are all required for required for immediate use on the work in connection with items for finished work have been agreed upon. A normal agreement signed and executed by the contractor is recorded in the office.

Sub-Division Officer

ಸಹಾಯಕ ಕಾರ್ಯ ಪಾಲಕ ಅಭಿಯಂತರರು
ಶೆಟ್ಟಿಹಳ್ಳಿ ಉಪವಿಭಾಗ, ದಾಸರಹಳ್ಳಿ ವಲಯ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಎಸ್.ಎಂ. ರಸ್ತೆ, ರವೀಂದ್ರನಗರ, ಬೆಂಗಳೂರು.

If Memorandum of Payment 012-14-000049

1) Total valve of work done or supplies made as per account within — E&F 521403=00
2) Deduct amount to be held in reserve being ..... percent Rs. ..... — KEB dt. (-)59808=00
3) " Balance — 461595=00
4) Deduct Payments :
   a) Amount of previous payment as in the Office Cash Book Voucher No. ..... Dated ..... S.D. No.....
   b) Payments cost store or other materials supplied.
      Now made recovery of amount creditable to this/other work — IT-103152- / KST-206304- / LWC-5157- / FSD-25780- / CBF-5158- = 624070-
      Amount paid on this bill Cheque/Cash.
5) Balance being unpaid valve of work done held in reserve
6) Deduct cash advance made on the Office Cash Book Voucher No. FSD
7) Net amount due to or from contract. — 453525=00
   Unadjusted items. — Add KEB dt. 59808=00
8) Advance to contractor for materials brought to site (as detailed) within value of Government materials supplied. — 459333=00

Audited and admitted for Rs. 521403=00
Passed for Rs. 459333=00
Accounts Superintendent
B.B.M.P. Dasarahalli Division

Technical Manager (TM-2) KRIDL, Dasarahalli Zone, Bangalore

Contractor's Signature

Received Rs. 624070=00 (in words)

by Cash and by adjustment of Payment as per memorandum.

30/5

Witnesses 1.

2.

Stamp

(For use in the Office)

Dated ..... **Signature of Contractor**

Technical Manager (TM-2) KRIDL, Dasarahalli Zone, Bangalore

Paid by me by Cheque No..... Dated.....

Cash Rs. .....Dated.....

Initials of Officer making payment

Executive Engineer

29. 31	Earthwork excavation for foundation of buildings, water, supply lines and electrical either in pits or in trenches 1.5m and above in width, in hard soil not exceeding 1.5 m in depth including dressing the bottom and sides of pits and trenches, stacking the excavated sol clear from edges of excavation with leads up to 50m after breaking of clods complete as per specifications
30. 32	Providing and installing at site of work 63mm (0.662) PVC pipes of 6 kg /cm2 including cost of pipes and specials and labour, including lowering into trenches laying true to line, level and perfect linking at joints leak
31. 33	Providing and installing at site of work 20mm GI pipes including cost of pipes and specials and labour, including lowering into trenches laying true to line, complete as per Direction of Engineer in charge for Public Taps. For motor/ Pipeline.
32. 34	Refilling available earth around pipelines, cables in layers not exceeding 20cms in depth, compacting each deposited layer by ramming after watering with lead up to 50m and lift 1.5 m including cost of all labour complete as per specifications

CERTIFICATE :

1) The work has been carried out as per specifications and work done satisfactorily.
2) The contractor has removed the debris from the work spot completely.

Rajesh N.K.

				597·24	173·84	103824=00	597·24	103824=00	
				1106=00	110=24	121925=00	1106=00	121925=00	
				84=00	193=98	16294=00	84=00	16294=00	
				478·69	59=36	28415=00	478·69	28415=00	
	TOTAL					4726189=00	4688723=00		
	KRIDL CHARGES @ 11%						468872=00		
	GRAND TOTAL					5367018=00	5157595=00	5367018=00	

Add ÷ 10% KRIDL 4726189=00 + 472618=00 = 5198807=00 → 59808=00

Add ÷ KEB Deposit 159811=00

Add ÷ Water testing 84000=00

5367018=00 → 5217403=00

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಶೆಟ್ಟಿಹಳ್ಳಿ ಉಪವಿಭಾಗ, ದಾಸರಹಳ್ಳಿ ವಲಯ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಬಿಎಸ್.ಎಂ ರಸ್ತೆ, ರವೀಂದ್ರನಗರ, ಬೆಂಗಳೂರು.

17.	Providing and fixing of 50mm GI Nipple to motor complete as per specification
18.	Providing and fixing o f50mm GI union to the motor complete as per specification
19. 29	Labour charges for erection of new /repaired submersible pump set along with GI pipes (32/50mm) cable (new submersible pump set if required will be supplied by the department free of cost and released pump set should be handed over to department) including transportation (each length =6.00m) complete as per specification
20. 27	Supplying and fixing miniature circuit breakers/ isolators in existing MCB distribution boards using necessary fixing material and wring complete as required, 40 to 63 Amps DP complete as per specification
21. 23	Supplying and laying of L.T.U.G cable having aluminum conductor PVC insulated sheathed galvanized steel wire/ steel tape armored cable with PVC outer sheathing 1.1 KV class 4 core 16 sqm cable (confirming to IS 1554) complete as per specification
22. 24	Digging of trenches of 0.6 mm x 0.50Mtrs wide refilling the trench to the required ground level and consolidating etc., complete setting road surfaces complete as per specification
23. 25	Supplying and fixing class- A GI pole/ wall/ drain crossing with necessary clamping arrangements for UG cable of 1.1 KV class 40mm complete as per specification
24. 26	Supplying and fixing wiring earth electrode for grounding conducts, IC cutouts and other equipment on the meter board using 40mm dia 2.90mm thick GI pipe 2.5 mtr long buried in a pit,/ the pit should be filled with equal proportion of salt and charcoal 150 mm all-round the pipe to complete depth the connections from the pipe to the conduit etc, is to be established though GI wire of size as per ISI specifications 7.3.3 of ISI 732 using 12mm dia bolts, nuts washers and check nuts etc., the pipe shall have 16 though holes of 122 dia complete as per specifications
25. 27	Supplying and fixing LT cast iron pot heads suitable for 1.12 KV class 16 sqmm UG cable filled with necessary bitumen/ insulating compound complete with terminals clamps, bolts nuts and washers etc. complete as per specifications
26. 28	Supplying shunt capacitor's confirming to IS 2834, 3 phase 400/440 volts grade for power factor improvement of roating machinery capacitor in KVAR rating No's complete as per specification
27. 29	Providing and fixing Gun Metal Gate wheel value confirming to IS specification of approved make as per direction including all lead and lifts etc. complete . 50mm dia complete as per specification
28. 30	Supplying and fixing of polished wood board made of not less than 15mm thick plank on both sides with planks made out on not more than 2 pieces and fixing the same to wall using tapered inverted wooden plugs screws etc., sizes 20 x 20 x 2.5 inches complete as per specification

				21·0	104·30	2190·00	21·0	2190·00	
				21·0	223·70	4698·00	21·0	4698·00	
				364·00	90·64	32993·00	364·0	32993·00	
				7·0	906·40	6344·00	7·0	6344·00	
				210·00	169·95	35690·00	210·00	35690·00	
				210·00	56·65	11897·00	210·00	11897·00	
				210·00	294·58	61862·00	210·00	61862·00	
				7·0	1699·57	11897·00	7·0	11897·00	
				7·0	271·92	1903·00	7·0	1903·00	
				7·0	1350·00	9450·00	7·0	9450·00	
				21·00	1515·80	31839·00	21·00	31839·00	
				7·00	311·58	2181·00	7·00	2181·00	

01.	Geophysical investigation of site for sinking borewell for supply drinking water to the habitation either through the hand pump M.W.S. or P.W.S.S. by vertical electrical sounding by adopting venner or schlumberger's method including reconnaissance survey of geological formation Geophysical investigation of existing ground water infecundity its quality, quantity and acceptability of the user indicating the location of site recommended depth of casting pipe required to seal the top in consolidated formation including an extra depth of 1.00 mtrs in consolidated formation of proper scatting of casing pipe, depth of drilling required to cover of full depth of aquifer proposed to be tapped. Probable yield and other information required including transportation technical personal and labour etc.,	
02.	Sinking borewell of 165mm dia clear using super fast hydraulic Rig of capacity 250 PSIG and above 900 CFM and above in all strata including over burden up on 20 mtrs fixing of casing pipes, collars and cap with necessary cutting, threading and welding including transportation of Rig and supporting vehicle, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (excluding cost of casing pipes, colars and cap etc.,	
	a)	0.00 to 50.00 Mtrs
	b)	50.00 to 100.00 Mtrs
	c)	100.00 to 150.00 Mtrs
	d)	150.00 to 200.00 Mtrs
	e)	200.00 to 250.00 Mtrs
	f)	250.00 to 350.00 Mtrs
03.	Supply of ISI mark 175mm nominal bore, plain end steel casing pipe, grade of steel Fee 410 of wall thickness 5.4mm thick confirming to IS 4270:2001 and latest amendments electric resistance welded steel tube materials and confirming to IS 1387/1993 and manufactured by basic open hearth electric or basic oxygen process in random lenth 5 to 7 mtrs. Both ends threated confirming to IS 554/1985, one end fixed with socket confirming to IS 4270:2001 and the other en with screwed pipes. All pipes shall be reasonable free room dfects. The tubes shall be reasonably straight should be with ISI Marking, weight 25.10 kg/mtr. (inclusive of all taxes and durties). Prices include-medium duty (A) casing pipe.	
04.	Providing and fixing 250mm dia PVC pipe Complete as per specification	
05.	175mmdiaMS Casing cap complete as per specification	
06.	M.S. casing pipe collars 'C' Class complete as per specification	

Items grouped under heads and sub-works of the estimate	Units	Previous Measurement		Present Measurement			Total Up-to-date		Remarks
		Qty	Cost	Qty.	Rate Rs. P.	Cost	Qty.	Cost	
				7·0	1938·46	13569·00	7·0	13569·00	
				350·0	315·18	110313·00	350·00	110313·00	
				350·0	418·00	144200·00	350·00	144200·00	
				350·0	458·35	160423·00	350·00	160423·00	
				350·0	484·10	169435·00	350·00	169435·00	
				350·0	560·32	196112·00	350·00	196118·00	
				700·00	600·49	420343·00	700·00	420343·00	
		630		619·00	1364·75	844780·00	619·00	844780·00	
		126		158·00	1133·00	142758·00	1133·00	142758·00	
				7·00	100·00	700·00	7·00	700·00	
				105·00	150·00	15750·00	105·00	15750·00	

Items grouped under sub-heads and sub-work of the estimate	Units	Previous Measurement		Present Measurement			Total Up-to-date		Remarks
		Qty	Cost	Qty.	Rate Rs. P.	Cost	Qty.	Cost	
				7.00	71265.25	498857.00	7.0	498857.00	
				1862.00	321.00	597702.00	1862.00	597702.00	
			322	320.00	84.80	27136.00	320.00	27136.00	
			4032	4020.00	164.29	660446.00	4020.00	660446.00	
				7.00	16228 / 113600.00 / 71265.25 / 12500	113596 / 660446.00 / 87500	7.00	498856 / 660446.00 / 87500	
				154000.00	0.34	52360.00	154000.00	52360.00	
				7.0	100.00	700.00	7.00	700.00	
				21.0	1600.00	33600.00	21.0	33600.00	
				21.0	1145.00	24045.00	21.0	24045.00	
				21.00	219.00	4599.00	21.00	4599.00	

07.	Supplying and delivery at site brand new texmo / innoval / Lubi / Sabar/ Atalanta /Vijay Calamal make suitable for vertical installation in 150mm dia borewell compressing of single stage of multistage CF pump close coupled means of stainless steel coupling to suitable HP suitable speed totally enclosed and filled with pure drinking water (Wet type) squirrel cage submersible induction motor suitable for operation of 3 PH, 50 Hz., 380/440 volts AC supply fitted with required accessories such as suction casing suction strainers sand guard Non return value etc., complete. The pump and motor shall form an integral unit with all the required fittings for suitable HP of motor and stage complete as per specification.
08.	Providing, laying & jointing Gi Pipes confirming to IS specification of approved make with fittings such as collars bends elbow tees nipple plugs with cuts threads using white lead & threads for joints wherever necessary as per direction including all lead & lift etc., complete 'A' grade (excluding cost of fittings) b 50mm dia GI pipe complete as per specifications.
09.	Providing & fixing heavy duty collar complete as per specification.
10.	Supplying and drawing 3 core PVC sheathed submersible pump cable manufactured with electrolytic grade copper with flexible copper conductor confirming to table 3 class 5 of IS : 8130-1984 and virgin grade PVC upto 1100 volts 4 sqmm of 56 strands 0.3mm dia complete as per specifications
11.	Supplying & delivery brand, new/ Essen/ Lotus Sunshine/ Adarsh/ GK controls best indigenous make combine energy meter –cum-control panel board unit of size 1200 x 600x 300mm minimum mechanically strong and vermin and water proof the unit shall have two detachable doors suitable for operation on 3ph, 50Hz, 380/440 volts, AC supply with spring loaded latch locking with a key ribs should be provided inside the door, canopy apron and louvers ventilators shall be provided the combine energy mtr cum control panel board unit suitable for operation on 3ph, 50 Hz, 380/440 AC supply shall be consisted etc., completed T panel board shall be fabricated on single unit in the above components panel board for suitable Pump set above components panel board of suitable Pump set above 6.50 HP to 15.00 HP with star delta starter (MR)
12.	Fabricating supplying and mounting MS box of 16 SWG suitable for floor/wall mounting, fully weather proof with provision for better hear description, (providing with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished 2 coats of red oxide primes paint and finally finished with approved colour enameled metal paint etc., complete as per specifications.
13.	Providing & fixing of clamps set and bore well cap t o the pump complete as per specification
14.	Supplying & delivery of brand new best make non return value of size 50mm as per IS : 778/84 with latest amendments with ISI mark (50mm Gate wheel value. Complete as per specifications
15.	Supplying & delivery of brand new best make Gate value of size 50mm as per IS : 778/84 with latest amendments with ISI mark (50mm Gate value for distributer pipeline. 50mm dia . Complete as per specifications
16	Providing and fixing of 50mm GI bend to motor complete as per specification